

L 12102-66

ACC NR: AP6000532

Orig. art. has: 4 figures.

SUB CODE: 11,20 / SUBM DATE: 14Dec64 / ORIG REF: 006 / OTH REF: 006

Card

2/2

ROMANOV, S.A.; FELDMAN, N.B.; KODOLINA, Y.A.

Study of the solid solutions of (Pb_{1-x}Sn_x)₂Se. Ser. AN
USSR. Ser. Chem. 29 no. 11:2010-2014 N 185. (1984 1984)

L. Vassilyevy anzhovskiy institut khimicheskikh
elementov i slobozhnikov khimicheskikh elementov.

ACC NRI: AP6032958

SOURCE CODE: UR/0363/66/002/010/1905/1905

AUTHOR: Fedulov, S. A.; Tatarov, Z. I.; Shklover, L. P.; Sergeyeva, N. I.;
Antonov, G. N.; Gurevich, M. Z.

60
B

ORG: none

TITLE: Growing $\text{NaLa}(\text{MoO}_4)_2$ single crystals

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 10. 1966, 1905

TOPIC TAGS: single crystal growth, molybdate, lanthanum compound, sodium compound,
laser effect, laser optic material

ABSTRACT: $\text{NaLa}(\text{MoO}_4)_2$ single crystals were grown by Czochralski technique in a high-frequency crystallizer in view of the laser effect, previously reported in Western literature, in certain $\text{M}^{\text{I}}\text{M}^{\text{III}}(\text{M}^{\text{VI}}\text{O}_4)_2$ type compounds, where M^{I} is an alkali metal, M^{III} a rare-earth element and M^{VI} is W or Mo. The starting material $\text{NaLa}(\text{MoO}_4)_2 \cdot 2\text{H}_2\text{O}$ was synthesized by precipitation reaction of sodium molybdate and lanthanum nitrate in solution. Pure $\text{NaLa}(\text{MoO}_4)_2$ with $\text{MP} = 1163^\circ\text{C}$ and scheelite structure was obtained by calcining the hydrated product at 900°C . The crystals up to 60 mm long and up to 12 mm in diameter were grown from pure $\text{NaLa}(\text{MoO}_4)_2$ melt. The laser effect at a fairly low generation threshold was observed at room temperature in $\text{NaLa}(\text{MoO}_4)_2$ single crystals activated with 1 at% Nd. The generation threshold may be significantly decreased in the optically more perfect crystals. Orig. art. has: 1 figure. [JK]

SUB CODE: 20/ SUBM DATE: 04Nov65/ ORIG REF: 001/ OTH REF: 005/ ATD PRESS: 5096
Cord 1/1 *egh* UDC: 548.55

ACC NR: AP7006214

SOURCE CODE: UR/0363/67/003/001/0208/0209

AUTHOR: Shapiro, Z. I.; Fedulov, S. A.; Venevtsev, Yu. N.

ORG: Physicochemical Institute im. L. Ya. Karpov (Fiziko-khimicheskiy institut)

TITLE: Determination of the Curie temperature of the ferroelectric LiNbO_3

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 3, no. 1, 1967, 208-209

TOPIC TAGS: Curie point, lithium compound, niobate, ferroelectric crystal, dielectric constant

ABSTRACT: In order to refine the Curie point of LiNbO_3 , temperature measurements of the dielectric constant were made on single crystals of both LiNbO_3 and a solid solution of the composition $\text{Li}(\text{Nb}_{0.9}\text{Ta}_{0.1})\text{O}_3$. The Curie temperature, determined from dielectric constant maxima, was found to be $1210 \pm 10^\circ\text{C}$ for LiNbO_3 and $1120 \pm 10^\circ\text{C}$ for the solid solution. In LiNbO_3 , the dielectric constant along the polar axis is much less than in the perpendicular direction, as in the case of barium titanate single crystals. Some anomalies in the dielectric constant were found in the $600-950^\circ\text{C}$ range. Thermographic measurements showed the melting point of LiNbO_3 to be $1245 \pm 5^\circ\text{C}$. Of all known ferroelectrics, LiNbO_3 has the highest Curie point. The data obtained on the Curie and melting points of LiNbO_3 are of major importance for the preparation of single-domain single crystals with higher dielectric, optical and piezoelectric properties.

Card 1/2

UDC: 537.226.33

ACC NR: AP7006214

Authors are grateful to G. P. Kuznetsova, V. L. Farshtendikor and R. M. Tolchinskaya for assistance in the determination of the melting point. Orig. art. has: 1 figure.

SUB CODE: 20/ SUBM DATE: 13Apr66/ ORIG REF: 003/ OTH REF: 004

Card - 2/2

PETRISHCHEVA, Polina Andreyevna, prof.; FEDULOV, S.G. [Fedulov, S.H.], translator; RAFAL'S'KA, Ye.B. [Rafal's'ka, IE.B.], red.

[How diseases of wild animals become human diseases] Iak khvoroby dykykh tvaryn staiut' khvorobamy liudyny. Kyiv, 1959. 32 p. (Tovarystvo dlia poshyrennia politychnykh i naukovykh znen' Ukrain's'koi RSR. Ser.5, no.14) (MIRA 13:2)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Petrishcheva).
(Animals as carriers of disease)

FEDULOV, S.L. (Kazan')

Construction of a water intake system. Vod.1 san.tekh.no.8:31
Ag '57. (MIRA 10:11)
(Water-supply engineering)

SELIVANCHIK, Ya.V.; KOLKOTIN, N.M.; ~~FEDULOV, S.V.~~; MAKAROVA, G.S.;
VOLKOV, Yu.A.; SHITOVA, L.N., red.izd-va; BOROVNEV, N.K.,
tekhn.red.

[Handbook on methods of repairing building machinery]
Instruktsiia po metodam remonta stroitel'nykh mashin. Moskva,
Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit.materialam,
1961. 30 p. (MIRA 15:2)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut
organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'-
stvu.

(Building machinery--Maintenance and repair)

FEDULOV, Vasilii Fedorovich; ANTONOV, Fedor Ivanovich; ZAKATALOVA,
Aleksandra Iosifovna; ORLOVA, I.A., red.

[Characteristics of the maintenance of tracks with re-
inforced concrete ties] Osobennosti soderzhania puti s
zhelezobetonnyimi shpalami. Moskva, Transport, 1964. 19 p.
(MIRA 17:10)

REDKOBORODYY, Yu.N.; FEDULOV, V.I.

Bolometric measurements of the radiation from argon ionized by
a shock wave. Zhur. tekhn. fiz. 35 no.9:1652-1657 8 '65.

(MIRA 18:10)

L 13951-66 EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWA(h) WW

ACC NR: AP6001695

SOURCE CODE: UR/0089/65/019/005/0446/0448

AUTHOR: Fedulov, V. I.; Borman, V. D.

ORG: none

TITLE: The measurement of pressure distribution in the wake of the front of a strong shock wave

SOURCE: Atomnaya energiya, v. 10, no. 5, 1965, 446-448

TOPIC TAGS: shock wave structure, strong shock wave, shock wave formation, ~~shock wave~~ propagation shock tube, shock wave front, gas pressure, pressure distribution

ABSTRACT: According to the unidimensional shock tube theory, there appears in the wake of the shock wave front a region of uniformly heated gas separated from the pushing gas by a contact surface (the so-called plug of the shock wave). The present letter reports on pressure studies across the plug of a shock wave generated within an electrical discharge shock tube shown in Fig. 1.

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UDC: 533.9

L 13951-66

ACC NR: AP6001695

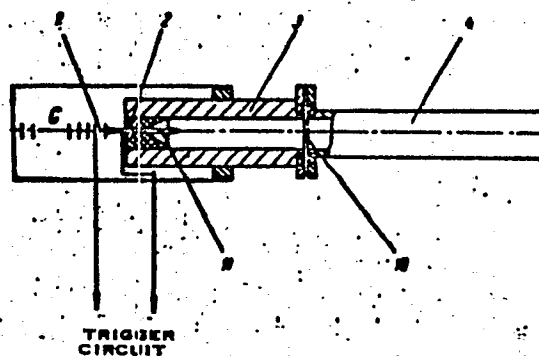


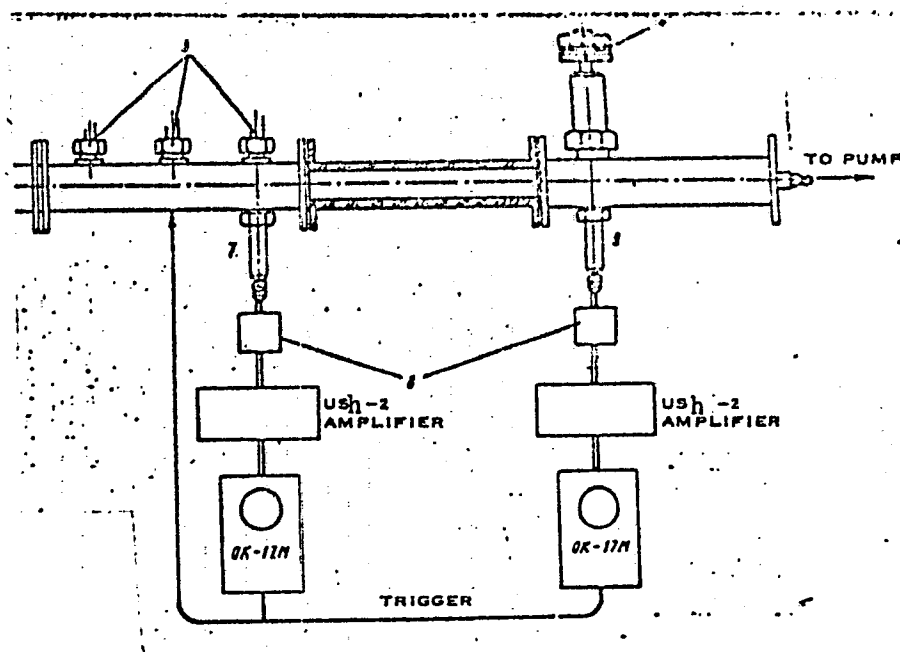
Fig. 1 Electrical discharge shock tube

1 -- spark discharger; 2 -- insulator; 3 -- high pressure chamber; 4 -- channel; 10 -- diaphragm;
11 -- central electrode.

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Card 3/4

L 13951-66

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5 - ionization sensors; 6 - diaphragm sensor; 7 - first piezo probe; 8 - cathode follower;
9 - second piezo probe;

SUB CODE: 20/ SUBM DATE: 14Apr65/ ORIG REF: 003/ OTH REF: 006

Card 4/4

FEDULOV, V.I.; BORMAN, V.D.

Measuring the pressure distribution behind the front of a strong
shock wave. Atom. energ. 19 no.5:446-448 N '65.

(MIRA 18:12)

ZHOKH, V.P.; FEDULOV, Ye.A.

Increasing the reliability of communication apparatus. Avtom., telem.
svyaz' 9 no.9:23-26 S '65. (MIRA 18:9)

1. Nachal'nik laboratorii signalizatsii i svyazi Pridneprovskoy
dorogi (for Zhokh). 2. Nachal'nik otдела svyazi Pridneprovskoy
dorogi (for Fedulov).

FEDULOVA, A. A.

Fedulova, A. A.

"The effectiveness of local fertilization when used in the rows under grain crops on sod-podzolic soils." All-Union Order of Lenin Academy of Agricultural Sciences imeni V. I. Lenin. All-Union Sci Res Inst of Fertilization, Agricultural Engineering, and Soil Science. Moscow, 1956. (Dissertation for the Degree of Candidate in Agricultural Sciences.)

Knizhnaya Letopis'
No. 25, 1956. Moscow.

NU. OL'K IV, V.D.; PPDULOVA, A.A.

Synthesis of plutonyl carbonates. Radiokhimiya 5, no. 6:72'-
747 '63. (MIRA 17')

FELDULOVA, A.A.; PROKOPENKO, K.F.; BAIASHOV, A.A.

Deposition of a tin-zinc alloy from a pyrophosphate electrolyte.
Zashch. met. 2 no.1:85-89 Ja-F '66. (MIRA 19:1)

1. Submitted April 14, 1965.

L 40849-66 EWT(m)/EMP(j)/T/EMP(t)/ETI IJP(c) RM/RY/JD
 ACC NR: AP6003325 (A) SOURCE CODE: UR/036/66/002/001/0085/0089
 AUTHOR: Fedulova, A. A.; Prokopenko, K. P.; Balashov, . A.
 ORG: Scientific-Research Technological Institute (Nauchno-Issledovatel'skiy tekhnologicheskii Institut)
 TITLE: Electrodeposition of a tin-zinc alloy from a pyrophosphate electrolyte
 SOURCE: Zashchita metallov, v. 2, no. 1, 1966, 85-89
 TOPIC TAGS: tin base alloy, tin compound, zinc containing alloy, zinc compound, metal coating, electrodeposition, electrolyte, CURRENT DENSITY
 ABSTRACT: The electrolyte recommended by T. L. Ramacher and J. Vaid (Metalloberflache A, 1962, 16, no. 3, 70) was, with some changes, used in the present study. Tin and zinc pyrophosphates were replaced by tin and zinc sulfates because Soviet industry does not produce the former. The electrolyte for the deposition of an alloy containing 80% Sn and 20% Zn consisted of 9.6 ± 1 SnSO₄, 8.4 ± 1 ZnSO₄, 138 ± 20 Na₂P₂O₇, and 1.0 g/l bone glue. The electrolyte had a temperature of $65 \pm 5^\circ\text{C}$ and a pH of 9.3 ± 0.5 . The alloy, containing 80% Sn and 20% Zn was used as an anode. The effect of the ratio of anode surface to cathode surface ($S_a : S_c$) on the initial and final concentration of metals in the electrolyte was studied at a cathode current density of $D_c = 1 \text{ amp/dm}^2$. An $S_a : S_c \geq 3$ was necessary for retaining a constant concentration of salts in the

Card 1/3 UDC: 621.357.7 : 669.38

L 40849-66

ACC NR: AP6003325

electrolyte. The increase in current density in most cases decreased the content of tin in the alloy, especially at concentrations of 100 and 200 g/l of free pyrophosphate. A study was made of the effect of various admixtures on maximum permissible current density, on current efficiency, and on the quality of the coatings (deposits). The presence of NH_4NO_3 at a current density of 1 amp/dm² resulted in the formation of bright fine-crystalline deposits. Instability of the electrolyte was observed during storage: Sn^{4+} accumulated in solution after 3-5 hr. The deposits were rough, gray, and banded in the presence of 3 g/l of Sn^{4+} in the electrolyte. The addition of 1 g/l of ammonium citrate resulted in a sharp decrease in the oxidation of tin. The content of Sn^{4+} increased by 1.7-2.36 g/l during storage of the original electrolyte, whereas in the electrolyte with the addition of 1 g/l of ammonium citrate it decreased during the same time by 0.8-0.72 g/l. The combined addition of 1 g/l ammonium citrate and 1 g/l NH_4NO_3 increased the current efficiency at $D_c = 1$ amp/dm². Mixing (stirring) of the electrolyte and increasing its acidity at all values of D_c (0.5-1.5 amp/dm²) resulted in a strong increase in the content of tin in the alloy (up to 98-100%). The addition of 1 g/l NiSO_4 increased the microhardness of the coating from 21 to 32 kg/mm² and improved the quality of the coating (it became more bright and had finer crystals). Copper and lead affected the quality of the deposit unfavorably. They were extracted by treatment at a low current density. The 80% Sn + 20% Zn alloy (9-12 μ thick) deposited on brass passed the corrosion test without change for 30 days at 40C and at a relative air humidity of 96 - 89%. The corrosion tests showed that steel samples should have a 6 - 9 μ -thick sublayer of copper with a thickness of the Sn-Zn coating

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L 40849-66

ACC. NR: AP6003325

$\rho \geq 18-24 \mu$. The alloy responded well to pressing into plastics of the K-21-22 and AG-4 types and to soldering under alcohol-colophony flux. Orig. art. has: 10 tables and 1 fig.

SUB CODE: 13,11/ SUBM DATE: 14Apr65/ ORIG REF: 005/ OTH REF: 003

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Cord 3/3 MLP

FEDULOVA, A. P., Cand Agric Sci -- (diss) "Duration of the stage of vernalization and selection on early ripening and non flowering state of cabbages in the northwest zone of the USSR) Leningrad, 1957, 21 pp (All Union Scientific Research Institute of Plant Production) (KL, 36-57, 106)

FEDULOVA, A. P.
USSR / General Biology. Genetics. Plant Genetics.

B-3

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 61934

Author : Fedulova, A. P.

Inst : ~~All Union Academy of Agriculture imeni Lenin.~~

Title : Obtaining Rapidly Ripening F₁ Harvest Hybrids of Whitehead Cabbage Which are Resistant to Blooming.

Orig Pub : Dokl. VASKhNIL, 1957, No 9, 23-27

Abstract : After various kinds of cabbage have been crossed, some were selected which, when crossbred into F₁, produce under north-western conditions rapidly ripening, relatively resistant to blooming, and harvestable progeny. With regard to these prerequisites, the best combinations are: Golden Hectar x 1,432 Odessa Kaporka and Golden Hectar 1,432 x VIR 1,133. -- S. Ya. Krayevoy.

Card 1/1

FEDULOVA, A.P.
USSR/Cultivated Plants - Potatoes. Vegetables. Melons.

M-3

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29800

Author : Lizgunova, T.V., Fedulova, A.P.

Inst : All-Union Plant Cultivation Institute.

Title : Vernalizing Cabbage in the Seed.

Orig Pub : Tr. po prikl. botan., genet. i slektsii, 1957, 31, No 2, 88-103.

Abstract : Thirty nine specimens of cabbage of diverse geographical origin were studied at the Pushkin Laboratories of the All-Union Plant Cultivation Institute in 1953-1955; all were related to annual and biennial forms of the following Brassica species: B. capitata, B. sabauda, B. gennifera, B. subspontanea, B. caulorapa, B. cauliflora. Vernalization was performed at 0-10° for 20, 40, 60 and 90 days. The short-staged varieties (in the vernalization stage)

Card 1/2

- 12 -

SHUL'TS, G.E.; BONDAR', V.V.; FEDULOVA, A.P.

Effect of foliar application of nitrogen fertilizers on the
oxidation-reduction processes in cotton leaves. Trudy Bot.
inst. Ser. 4 no.16:64-74 '63. (MIRA 17:2)

LUKASHEV, K. I., FEDULOVA, L. G.

Chemical composition of loess soils from Rutkovich and Dubrovno districts. Dokl. AN BSSR 4 no. 7: 298-306 J1 '60.

(MIRA 13:8)

1. Institut geologicheskikh nauk AN BSSR.
(White Russia---Loess)

TSVETKOV, V.N., kand. tekhn. nauk, dotsent; FEDULOVA, L.L., inzh.

Determining the constant of the relaxation time of strains
in chrome shoe-upper leather. Nauch. trudy MTILP 25:73-81
'62. (MIRA 16:8)

1. Kafedra tekhnologii izdeliy iz kozhi Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.

AUTHORS: Ped', D. A., Fedulova, M. N. SOV/50-58-8-2/18

TITLE: The Frequency of Planetary Frontal Altitude Zones of the Natural Synoptic Periods (Povtoryayemost' planetarnykh vysotnykh frontal'nykh zon yestestvennykh sinopticheskikh periodov)

PERIODICAL: Meteorologiya i gidrologiya, 1958, Nr 8, pp. 11-16 (USSR)

ABSTRACT: The zones mentioned in the title represent one of the most important factors of the total circulation of the atmosphere. They reach a length of 5 000 - 10 000 km and encircle sometimes an entire hemisphere (Refs 2, 3, 8, 10, et al.). These zones (PFAZ) are characterized by great temperature gradients and wind velocities and form regions of concentration of thermodynamical circulations solenoids and of the most intensive dynamical pressure changes. An uninterrupted transformation of potential energy of the air masses which are to a great extent different in the kinetic energy of the jet circulations (struynye techeniya) and of the vertical movements takes place in the PFAZ. Therefore the precipitations and abrupt changes of the gradients of the wind velocity are frequent in the PFAZ. This is especially important for aviation. Several PFAZ exist on the northern hemisphere (Refs 3, 4, 9, et al.). They are in

Card 1/3

The Frequency of Planetary Frontal Altitude Zones of the Natural Synoptic Periods

SOV/50-58-8-2/18

close connection with each other. Their interaction favors the heat exchange of the air between the zones of latitude and the transformation of the thermobaric fields of the troposphere. In consequence of this interaction the PFAZ flow together in individual sections. The PFAZ show considerable seasonal changes according to geographical position, intensity, and height. These fluctuations depend as well on the type of the synoptic process. The investigation of the latter yields the most complete characteristic of the PFAZ. The present paper deals with the theme mentioned in the title in January and July on the strength of average data of the AT_{500} of the natural synoptic periods. The position and intensity of the PFAZ was determined on the northern hemisphere between the meridians of 30° western latitude and 78° eastern longitude. Table 1 shows that the geopotential of the axis line was approximately conserved, showed, however, in January 77,1% and in July 93,6% of all cases deviations from the mean value (with a tolerance of ± 4 dkm). The amplitude of the deviations amounted in January to 36 dkm, in July to 16 dkm. The mean value of the said geo-

Card 2/3

The Frequency of Planetary Frontal Altitude Zones of the Natural Synoptic
Periods

SOV/50-58-8-2/18

potential is increased by 32 dkm from winter to summer. Figure 1 shows the average position of the axis lines of the PFAZ in January and July. Figure 3 shows the curves of frequency of the intensity of the PFAZ. There are 3 figures, 2 tables, and 14 references, 12 of which are Soviet.

Card 3/3

YAVORSKIY, N.P. [Iavors'kyi, M.P.]; FEDUSIV, M.N. [Fedusiv, M.M.]

Photocolorimetric determination of phenol in hormonal preparations. Farmatsev. zhur. 18 no.4:34-39 '63.

(MIRA 17:7)

1. Kafedra farmatsevticheskoy khimii L'vovskogo meditsinskogo instituta (zav. kafedroy prof. M.M. Turkevich).

[illegible]

Card 1/3

24/000/225
12-21-50

FED', D.A., FEDULOVA, M.N.

Deformation of planetary high-level frontal zones of natural synop-
tic periods. Trudy TSIP no.108:58-65 '61. (MIRA 14:5)
(Weather forecasting)

KATS, A. L.; KHRABROV, Yu. B.; FEDULOVA, M. N.; YAKUSHEVA, O. M.

Use of empirical influence functions to forecast mean values
of H_{500} at the present time and the tendency for the subsequent
synoptic period. Trudy TSIP no.119:24-35 '62. (MIRA 16:1)

(Atmospheric pressure)

AVERBUKH, S. K.; FEDULOVA, M. N.

Use of 24-hour prognostic maps of H500, computed on a universal
electronic calculator, in forecasting a synoptic period. Trudy
TSIP no. 119:78-81. 1982. (MIRA 16:1)

(Atmospheric pressure)
(Weather forecasting)

RAFAILOVA, Kh. Kh.; TOKUNOVA, A. I.; FEDULOVA, M. N.; SHABUNINA, T. A.

Some results of an operative check of the accuracy of experimental forecasts of fields of pressure for each of three days.
Trudy TSIP no.119:98-103 '62. (MIRA 16:1)

(Atmospheric pressure)

ACCESSION NR: AP4022213

S/0050/64/000/003/0030/0034

AUTHOR: Fedulova, M. N.

TITLE: Computing the average value of H_{500} of a synoptic period from the first day data on the value

SOURCE: Meteorologiya i gidrologiya, no. 3, 1964, 30-34

TOPIC TAGS: synoptic period, H_{500} , isobar, weather forecasting, synoptic chart, climatic data

ABSTRACT: Preservation of the basic deformational field has been used as the essential factor in prediction over a synoptic period. In doing this, the inertia expressed in preserving the direction of development of the synoptic processes has been considered, in addition to the climatic data for the period. However, predictions are complicated by the fact that the charts are prepared much too late (at the end of the second day of a period), and the charts are thus useful for only three or four days. The author has attempted to use the principle of S. T. Pagava (Printsiy* sostavleniya dolgosrochnykh prognozov pogody* maloy zablagovremennosti. Gidrometooizdat, M., 1961; Spособ rascheta vo vtoroy den' yestestvennogo

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ACCESSION NR: AP4022213

sinopticheskogo perioda srednego znacheniya H_{500} na posleduyushchiye dni yego. Meteorologiya i gidrologiya, No. 5, 1962) to predict the entire synoptic period from first-day information. She has assumed that for different forms of atmospheric circulation the relation between values of H_{500} for the first day and those for the entire period will vary substantially. All processes were divided into five groups, depending on the type of circulation observed during the first day of the period. In all, 288 periods were investigated, fairly evenly distributed among the five types. The correlation factors were computed for H_{500} during the first day and for the entire period. These factors ranged from 0.6 to 0.9, with an average of 0.8. Tabular data show comparisons of the various values. The author concludes that an intelligent use of the suggested method will permit prediction of the average field of H_{500} for a period from first-day information if the type of circulation is considered and is indicated by an objective circulation index. Orig. art. has: 2 figures, 2 tables, and 2 formulas.

ASSOCIATION: Tsentral'nyy institut prognozov (Central Forecasting Institute)

SUBMITTED: 00

DATE ACQ: 08Apr64

ENCL: 00

Card 2/3

ACCESSION NR: AP4022213

SUB CODE: AS

NO REF SOV: 004

OTHER: 000

Card 3/3

L 33239-66 EWT(1)/FCC GW

ACC NR: AP6025877

SOURCE CODE: UR/0050/66/000/004/0026/0028

AUTHOR: Fedulova, M. N.

ORG: Hydrometeorological Scientific Research Center (Gidrometeorologicheskiy nauchno-issledovatel'skiy tsentr)

20

B

TITLE: Forecasting the mean value of the indices of atmospheric circulation for a natural synoptic period

12

SOURCE: Meteorologiya i gidrologiya, no. 4, 1966, 26-28

TOPIC TAGS: atmospheric circulation, synoptic meteorology, weather forecasting

ABSTRACT: The objective of this study was clarification of the possibility of numerical forecasting of the mean value of indices of atmospheric circulation for a natural synoptic period. The AT500 chart for the trend of a natural synoptic period is known to be similar to the AT500 chart for the entire period. This has made it possible to derive regression equations relating the indices of zonal and meridional circulation for the trend and the entire natural synoptic period. However, for 5-7-day forecasts, and for other forecasts, it is important to know on the first day of the period whether in the course of the beginning natural synoptic period there will be an intensification of meridional circulation in comparison with the preceding natural synoptic period, or, vice versa, during

Card 1/2

UDC: 551.509.329

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the course of this period meridional circulation will attenuate and zonal circulation will be increased. It is this problem which the author has solved in large part in this study. The approach used is the use of empirical influence functions. The study was based on 274 periods, broken down by form of circulation observed on the first day of the period. A total of 132 forecasts were made. It was shown that use of the new approach and formulas presented results in improvement of the accuracy of forecasts for all forms of circulation except easterly. Orig. art. has: 1 figure, 3 formulas and 2 tables. [JPRS]

SUB CODE: 04 / SUBM DATE: 28Nov65 / ORIG REF: 008

LS

Card 2/2

5(4),18(3)

AUTHORS:

Sharonova, T. N., Fedulova, N. I.,
Krasil'shchikov, A. I.

SOV/76-33-1-35/45

TITLE:

Investigation of the Conditions of the Origin and Development
of the Pitting Corrosion of Iron (Issledovaniye usloviy
vozniknoveniya i razvitiya pittingovoy korrozii zheleza)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 1, pp 208-212
(USSR)

ABSTRACT:

In contrast to the usual corrosion, the pitting corrosion
proceeds in the form of patches (Refs 1-9); the corrosion
spots are, however, not formed by impurities (Ref 8). In order
to investigate this case the mechanism of the corrosion cells,
produced by oxygen, has to be investigated as well as the
growth mechanism of these corrosion spots. These problems were
investigated by tests with various aqueous solutions. Iron
samples were tested with 0.29% C, 0.01% Si, 0.42% Mn, 0.019% P,
and 0.039% S and photographs taken. The tests were conducted
at 60° with various salt solution combinations (NaCl, $K_2Cr_2O_7$,
KCl, $NaNO_2$, $Ca(NO_3)_2$) and HCl and KOH solutions at varying
periods of treatment (Figs 1-10). In the presence of

Card 1/2

Investigation of the Conditions of the
Origin and Development of the Pitting Corrosion of Iron

SOV/76-33-1-35/45

oxidizing agents the corrosion is determined by the diffusion velocity of these depolarizers towards the metallic surface. In these cases the current intensity does not depend on the electrode potential, the latter, however, can attain various values. The formation of various potential differences is obviously favored in such cases and the differences bring about the pitting corrosion. The occurrence of local potential differences on mercury electrodes was also observed by A. N. Frumkin and B. P. Bruns. The presence of a passivator, the amount of which is not sufficient for passivating the surface (e.g. NaNO_2), in the solution may also favor a pitting corrosion. It is assumed that the autocatalytic character of the development of the pitting corrosion spots can be explained by the formation of insoluble corrosion products and the occurrence of differential aeration (Ref 4). There are 10 tables and 16 references, 12 of which are Soviet.

ASSOCIATION: Institut azotnoy promyshlennosti, Moskva
(Institute of Nitrogen Industry, Moscow)

SUBMITTED: July 16, 1957

Card 2/2

FEDULOVA, N.M.

Stage development of winter barley under conditions of fall planting.
Agrobiologiya no. 3:357-361 My-Je '61. (MIRA 14:5)

1. Vsesoyuznyy selektsionno-geneticheskiy institut, Odessa.
(Barley) (Vernalization)

GUDKOV, S.F.; FEDULOVA, V.P.

Incomplete oxidation of methane - propane mixtures. Gaz.prom.
no.10:32-29 0 '57. (MIRA 10:10)
(Oxidation) (Propane) (Methane)

GUDKOV, S.F.; FEDULOVA, V.P.

Oxidation of methane-propane mixtures by atmospheric oxygen in
the presence of nitrogen oxides. Trudy VNIIGAZ no.6:111-116
'59. (MIRA 12:10)

(Hydrocarbons) (Formaldehyde)

SHURHIKOV, A.P.; TSYB, I.P.; POSKO, A.G.; FICHMAN, N.A.; PEDULOVA, V.T.

Sulfurization method of extracting nonferrous and rare metals
from lead cake. TSvet. met. 38 no.9:36-41 S '65.

(MIRA 18:12)

YURGANOV, N.N.; SAFONOV, N.A.; FEDULOVA, V.V.

Relation of clinker quality to the return of recovered dust to the kiln.
TSement 29 no.1:10-11 Ja-F '63. (MIRA 16:2)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy i
nauchno-issledovatel'skim rabotam tsementnoy promyshlennosti.
(Cement clinkers)

PYATNOVA, Yu.B.; FEDULOVA, V.V.; SARYCHEVA, I.K.; PREOBRAZHENSKIY, N.A.

New synthesis of 5,8,11,14-eicosatetraenoic (arachidonic) acid.

Zhur. ob. khim. 34 no.10:3317-3320 O '64.

(MIRA 17:11)

1. Monkovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V. Lomonosova.

FEDULOVA, V. F., Director

Scientific Production Lab, Kazakh Scientific Research Vet. Institute

"Utilization of natural virus in infectious pleuropneumonia of goats."

SO: Vet. 24 (4) 1947, p. 23

RISELEV, V. S. Cand. of Vet. Sci.; FEDULOVA, E. F. Fellow
All-Union Institute of Experimental Veterinary Medicine.

"Diagnosis of open forms of tuberculosis of cattle by
the flotation method."

SO: Veterinariya 28(12), 1951, p. 34

FEDULOVA, E.F. Asst Professor (Poltava)

"On the method of staining Trichomonas"

Report given at 13th Inter-VUZ (Higher Educational Insts.) Scientific-Industrial Conference, held February, 1956 at Kiev Vet Inst.

FEDULOVA, Ye.F., dotsent.

Diagnosis of trichomoniasis in cattle. Veterinariia 33 no.5:71-73
My '56. (MLRA 9:8)

1. Poltavskiy sel'skokhozyaystvennyy institut.
(Cattle--Diseases and pests) (Trichomoniasis)

KHOMENKO, G.I., professor; RICHENKO, N.I., kandidat meditsinskikh nauk;
FEDULOVA, Ye.G., kandidat meditsinskikh nauk

Out-patient treatment of dysentery in adults. Sov.med. 20 no.8:
70-74 Ag '56. (MLRA 9:10)

1. Iz Instituta infeksionnykh bolezney Akademii meditsinskikh nauk
SSSR (dir. - chlen-korrespondent Akademii meditsinskikh nauk SSSR
prof. I.L.Bogdanov)
(DYSENTERY, BACILLARY, ther.
in ambulatory management)

FEDULOVA, Ye.G., Cand Med Sci -- (diss) "Comparative evaluation of the effectiveness of certain methods of treating dysentery." Kiev, 1958, 13 pp (Kiev Order of Labor Red Banner Med Inst im Academician A.A. Bogomolets) 200 copies (FL, 28-58, 111)

- 108 -

FEDU OVA, YE. G.; KHOMENKO, P. I.; DUBINSKAYA, YE. A.

"Problems of therapy of dysentery patients."

Report at the 13th All-Union Congress of Hygienists,
Epidemiologists and Infectionists, 1959

MOROZKIN, N.I., prof.; FEDULOVA, Ye.G. (Kiyev)

Oxygen therapy in infectious Botkin's hepatitis. Vrach.delo no.8:
823-825 Ag '59. (MIRA 12:12)

1. Institut infektionnykh bolezney AMN SSSR. 2. Chlen-korrespondent
AMN SSSR (for Morozkin).
(OXYGEN--THERAPEUTIC USE) (HEPATITIS, INFECTIOUS)

MOROZKIN, N.I., prof.: VERZHKHOVSKAYA, A.A., kand.meditsinskikh nauk;
FEDULOVA, Ye.G., kand.meditsinskikh nauk; GROMASHEVSKAYA, L.L.,
kand.meditsinskikh nauk (Kiyev)

Age characteristics of the clinical course of infectious hepatitis.
Vrach.delo no.5:457-462 My '60. (MIRA 13:11)

1. Institut infektsionnykh bolezney AMN SSSR. 2. Chlen-korrespondent
AMN SSSR (for Morozkin).
(HEPATITIS, INFECTIOUS)

MOROZKIN, N.I., prof., otv. red.; PADALKA, B.Ya., prof., red.;
KHOMENKO, G.I., prof., red.; UGRYUMOV, B.L., doktor med.
nauk, red.; FEDULOVA, Ye.G., kand. med. nauk, red.
RICHENKO, N.I., red.; CHUCHUPAK, V.D., tekhn. red.

[Infectious hepatitis; collection of scientific works]
Infektsionnyi gepatit; sbornik nauchnykh rabot. Kiev,
Gosmedizdat USSR, 1961. 305 p. (MIRA 15:7)

1. Akademiya meditsinskikh nauk SSSR, Moscow. Institut in-
fektsionnykh boleznei AMN SSSR. 2. Chlen-korrespondent Akademii
meditsinskikh nauk SSSR (for Morozkin).
(HEPATITIS, INFECTIOUS)

FEDULOVA, Ye.G.; TRINUS, Ye.K.

Side effects during antibiotic therapy of Botkin's infectious hepatitis. Antibiotiki 6 no.4:336-339 Ap '61. (MIRA 14:5)

1. Institut infektsionnykh bolezney AMN SSSR, Kiyev.
(HEPATITIS, INFECTIOUS) (TETRACYCLINE)

FEDULOVA, Ye.M.

Results of studying the wind waves of the Kuybyshev Reservoir.
Sbor. rab. Koms. GMO no.5:70-88 '65. (MIRA 18:10)

NIKOLAYEVA, A.V., inzhener; FEDULOVA, Z.M.

New standards for meat and dairy products. Standartizatsiya no.3:
56-58 My-Je '56. (MLRA 9:9)

1.Komitet standartov, mer i izmeritel'nykh priborov.
(Dairy products--Specifications)

SOV/124-58-10-11597

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 10, p 129 (USSR)

AUTHOR: Fedulova-Lokkenberg, L. K.

TITLE: Determination of the Settling of Foundations on an Elastic Footing With Underlying Rock (Opredeleniye osadok fundamentov na uprugom osnovanii, podatilayemom skaloy)

PERIODICAL: V sb.: Materialy k 4-mu Mezhdunar. kongressu po mekhan. gruntov i fundamostro. Moscow, AN SSSR, 1957, Vol 2, pp 2(?)6-252

ABSTRACT: A method for determination of the settling of foundations on an elastic footing with underlying rock is described. This method of calculation is analogous to a method proposed earlier for contructions on a homogeneous elastic footing [see Zhemochkin, B. N. , Raschet balok na uprugom poluprostranstve i poluploskosti (Design Calculation of Beams on an Elastic Semispace and Semi-plane), Moscow, Izd-vo Voenno- inzh. akad. , 1937). The only difference consists in a different expression for the settling of the surface of the semispace produced by a single force. The values required for the calculation of the functions are obtained

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SOV/124-58-10-11597

Determination of the Settling of Foundations on an Elastic (cont.)

and determined from the thickness of the elastic layer. An analysis of the results of a specific example is included.

P. I. Klubin

Card 2/2

FEDULOVA-LOKKENBERG, L.K., kand.tekhn.nauk

Design of structures for an elastic foundation of varying depths,
treated as a plane problem. Trudy MIIGS no.8:120-128 '58.
(MIRA 14:7)

(Structures, Theory of)
(Foundations)

BYCHKOV, Dmitriy Vasil'yevich, prof.dokt.tekhn.nauk; KLEYN, Georgiy Konstantinovich, prof.; FEDULOVA-LOKKENBERG, Lidiya Konstantinovna, dots.; PORTAYEV, Lev Petrovich, dots.; OSINOMENISKII, Yuriy TSezarevich, kand. tekhn. nauk; CHELBAYEVA, Yevgeniya Mikhaylovna, assistant; GUSEV, Boris Mikhaylovich, inzh.; VILKOV, G.N., red. izd-va; TEMKINA, Ye. L., tekhn. red.

[Manual for practical work in the theory of structures] Rukovodstvo k prakticheskim zaniatiyam po stroitel'noi mekhanike. Izd.2., ispr. i dop. Moskva, Gos. izd-vo lit-ry po stroit., arkhitekt., i stroit. materialam, 1961. 326 p. (MIRA 14:9)

(Structures, Theory of —Study and teaching)

FEDUN, A.A.

Reanimation in cases of severe injury to the large vessels of the neck and trachea. Khirurgia no.3:40-41 Mr '55. (MLRA 8:7)

(NECK--WOUNDS AND INJURIES)

(TRACHEA--WOUNDS AND INJURIES)

(RESUSCITATION)

VLASYUK, P.A., akademik; ZEROV, D.K., akademik; PSHENICHNYY, P.D., akademik;
ROMANENKO, I.N., akademik, otvetstvennyy red.; MOVCHAN, V.A.;
RODIONOV, S.P.; TYULENEV, N.A.; DAVYDOV, G.M., kand. ekon. nauk;
KUGUKALO, I.A., kand. ekon. nauk; BEREZIKOV, V.S.; FEDUN, A.D.;
GRUDZINSKAYA, O.S., red. izd-va; YURCHISHIN, V.I., tekhn. red.

[Natural conditions and resources of the Polesye; transactions of the Conference on Problems of the Development of the Productive Forces of the Ukrainian Polesye] Prirodnye uslovia i resursy Poles'ia; trudy konferentsii po voprosam razvitiia proizvoditel'nykh sil Poles'ia USSR. Kiev. Pt.1. 1958. 123 p. (MIRA 11:7)

1. Akademiya nauk URSS, Kiev. Rada po vyvchenniu produktivnykh syl.
2. Akademiya nauk USSR (for Vlasjuk, Zarov). 3. Ukrainskaya akademiya sel'skokhozyaystvennykh nauk (for Vlasjuk, Pshenichnyy, Romanenko). 4. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I. Lenina (for Vlasjuk). 5. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I. Lenina (for Romanenko). 6. Chlen-korrespondent akademii nauk USSR (for Movchan, Rodionov, Tyulenev). 7. Zamestitel' nachal'nika otdela svodnykh perspektivnykh planov Gosplana USSR (for Beresikov). 8. Nachal'nik podotdela sel'skogo khozyaystva otdela svodnykh perspektivnykh planov Gosplana USSR (Fedun).

(Polesye--Natural resources)

ROMANENKO, I.N., akademik, otvetstvennyy red.; VLASYUK, P.A., akademik, red.; ZEROV, D.K., akademik, red.; RODIONOV, S.P., red.; TYULENEV, N.A., red.; PSHENICHNYY, P.D., akademik, red.; DAVYDOV, G.M., kand. ekon. nauk, red.; KUGUKALO, I.A., kand. ekon. nauk, red.; BEREZIKOV, V.S., red.; FEDUN, A.D., red.; KOZAKEVICH, T.A., red. izd-va; SIVACHENKO, Ye. K., tekhn. red.

[Problems in the economy of Polesye; transactions of a conference]
Voprosy ekonomiki Poles'ia; trudy konferentsii. Kiev, Izd-vo Akad. nauk USSR. Vol. 4. 1958. 134 p. (MIRA 11:10)

1. Konferentsiya po voprosam razvitiya proizvoditel'nykh sil Poles'ia USSR. 1955. 2. Akademiya nauk USSR (for Vlasjuk, Zerop,).
3. Ukrainskaya Akademiya sel'skokhozyaystvennykh nauk (for Vlasjuk, Romanenko, Pshenichnyy). 4. Vsesoyuznaya Akademiya sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Vlasjuk). 5. Chlen-korrespondent Vsesoyuznoy Akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Romanenko). 6. Chlen-korrespondent Akademii nauk USSR (for Rodionov, Tyulenev). 7. Zamestitel' nachal'nika otdela svodnykh perspektivnykh planov Gosplana Soveta Ministrov USSR (for Beresikov).
8. Nachal'nik podotdela sel'skogo khozyaystva i zagotovok otdela svodnykh perspektivnykh planov sel'skogo khozyaystva Gosplana Soveta Ministrov USSR (for Fedun).

(Polesye--Economic conditions)

FEDUN, I.F.

Acute intestinal obstruction conditioned by lambliasis. Sov. zdrav.
Kir. no.3: 57-58 My-Je '62. (MIRA 15:5)
(INTESTINES—OBSTRUCTIONS) (GIARDIASIS)

FEDUN, I.F.

Morphological changes in the vermiform process in lamblasis.
Sov.zdrav.Kir. no.4:15-19 J1-Ag '62. (MIRA 15:8)
(GIARDIASIS) (APPENDIX (ANATOMY))

ABRAMOV, M.I.; BELIZIN, V.I.; DEVITSKIY, S.M.; ZATULA, V.I.; ZOLOTAREV,
V.N.; ZOLOTAREV, I.S.; IL'INA, M.I.; KOLYSHKINA, M.S.; KUDASOV,
I.P.; MAKHLIN, V.N.; MEDVEDEV, G.S.; NEKHAYEV, I.S.; OLEYNIKOV, M.S.;
PARKHOMENKO, P.N.; TOMASHEVSKIY, V.I.; PRUDNETS, I.Kh.; KHRAMTSOV,
V.K.; ZOLOTAREV, N.V., red.; SEVRYUKOV, P.A., tekhn.red.

[Planning on collective farms; manual] Planirovanie v kolkhozakh;
spravochnik. Kursk, Kurskoe knizhnoe izd-vo, 1960. 437 p.

(MIRA 14:2)

(Collective farms)

GOROKHOVSKIY, Anatoliy Vladimirovich; KHMEK'NITSKIY, Yevgeniy Pavlovich;
FEDUNIN, G.A., otv.red.; NOVIKOVA, Ye.S., red.; MARKOCH, K.G.,
tekhn.red.

[Communications technician servicing radio stations] Monter
svyazi po obsluzhivaniyu radiostantsii. Moskva, Gos.izd-vo
lit-ry po voprosam svyazi i radio, 1961. 391 p.

(MIRA 14:3)

(Radio stations--Maintenance and repair)
(Electronic technicians--Handbooks, manuals, etc.)

FEDUNIN, G. A.

107-57-6-24/57

AUTHOR: Gaplichuk, O. (Kiyev)

TITLE: A Conference on Automation of Radio-Communication and Radio-Broadcasting Equipment (Konferentsiya po avtomatizatsii sredstv radiosvyazi i radioveshchaniya)

PERIODICAL: Radio, 1957, Nr 6, p 22 (USSR)

ABSTRACT: The Ukrainian Directorate of NTORiE imeni C. A. Popov and the Kiyevskaya direktsiya radiosvyazi i radioveshchaniya (DRSiV) (Kiyev Directorate of Radio Communications and Radio Broadcasting) have organized a scientific and engineering conference devoted to the problems of automation of radio broadcasting and radio communication means. Inventors of Ukraine and Belorussia, engineers, technicians, scientific workers, representatives of the Ministries of Communications of USSR and UkrSSR, etc., took part in the conference. I. Kirichenko, Minister of Communications of the UkrSSR, delivered a report on fundamental problems in the field. G. Fedunin, a representative of the Technical Division of the Ministry of Communications, USSR, delivered a report on the aims of automation and requirements of the automatic equipment. P. Karavayev, of the Kuybyshevskoye otdeleniye Nauchno-issledovatel'skogo instituta Ministerstva svyazi (the Kuybyshev branch of the

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107-57-6-24/57

A Conference on Automation of Radio-Communication and Radio-Broadcasting

Scientific and Research Institute of the Ministry of Communications), reported on various systems of automation of shortwave transmitters and on various automatic frequency-control systems. I. Seleznev, a representative of the same institute, delivered two reports: (1) on economical operation of radio broadcast stations, and (2) on thyatron-type remote-control systems. In all, there were twelve reports delivered. It was noted in the decisions of the Conference that the introduction of automation was inadequate and that the automation of equipment already in operation should be conducted by operating organizations themselves.

AVAILABLE: Library of Congress

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FEDUNIN G.A.

PHASE I BOOK EXPLOITATION

1080

USSR Ministerstvo svyazi

Inzhenerno-tekhnicheskiy spravochnik po elektrosvyazi. [vyp] VIII:
Radiosvyaz' (Handbook on Electric Communications. v. 8: Radio
Communication) Moscow, Svyaz'izdat, 1958. 500 p. 20,000 copies printed.

Resp. Ed.: Fedunin, G.A.; Ed.: Galoyan, M.A.; Tech. Ed.: Shefer, G.I.

PURPOSE: This monograph is addressed to engineering and technical personnel
working in radio communications.

COVERAGE: According to the editors this book represents a first attempt to assemble
in one handbook technical information on radio communications equipment and
communication channels. Because of the great volume of material on the subject
it was necessary to break up the work into three separate issues. The present
issue contains general information on problems of radio communication, the
design and construction of radio communications centers and antennas, and the
propagation of radio waves. The material on transmitter and receiver equip-
ment for national radio communications networks has been published in independent
issues of the handbook. In composing the present work, use was made of material

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supplied by the various research, design and planning, and operating organizations of the Ministry of Communications of the USSR, i.e., NII (Scientific Research Institute), GSPI (State All-Union Design and Planning Institute), MDRR (Moscow Board of Radio Communications and Radio Broadcasting), and TsTR-Tsentr tekhnicheskogo radiokontrolya (Radio Engineering Control Center). The recommendations and standards proposed by MKKR (International Consultative Commission on Radio Communications) and MKKIT (International Telegraph and Telephone Consultative Committee) were also taken into consideration. A number of standards contained in the book were established by experiment and are subject to further checking and refinement. Some data is given on outmoded communications equipment still in use. A large group of radio communications specialists, working under the direction of the main editorial staff for electrocommunications engineering and technical handbooks, contributed material for this handbook. The editorial staff consists of K.Ya. Sergeychuk, A.D. Fotushenko and B.S. Grigor'ev. K.M. Kosikov wrote Section III, B.F. Mititello wrote Chapter 4 of Section I, A.M. Model' wrote Chapters 1,2,3,4,5, and 6 of Section II, G.A. Savitskiy wrote Chapter 7 of Section II, E.G. Fedorovich wrote Chapters 1,2,3,4,5,6, and 7 of Section I, and A.P. Shchetinin wrote Chapter 5 of Section I. There are no references.

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AVAILABLE: Library of Congress	JP/mas
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MIROSHIN, Aleksandr Ivanovich; FEDUNIN, G.A., , otv.red.; NOVIKOVA, Ye.S.,
red.; KARABILOVA, S.F., tekhn.red.

[Tuning of plate modulated radio transmitters] Nastroiika radio-
peredatchikov s avtoanodnoi moduliatsiei. Moskva, Gos.izd-vo lit-ry
po voprosam svyazi i radio, 1959. 73 p. (MIRA 12:9)
(Radio--Transmitters and transmission)

BESIDSKIY, Grigoriy Zusevich; GOLOMBEK, Il'ya Iosifovich; FEDUNIN,
G.A., otv. red.; NOVIKOV, S.A., red.; CHURAKOVA, V.A., tekhn.red.

[Modern FM ultrashortwave broadcasting stations]Sovremennye
UKV ChM radioveshchatel'nye stantsii. Moskva, Sviaz'izdat,
1962. 87 p. (MIRA 15:12)
(Radio, ShortWave--Transmitters and transmission)

SAPUNOV, Vasily Andreyevich; FEDUNYAK, Irina Il'inichna; RABINOVICH, A.,
red.; KALECHITS, G., tekhn.red.

[Methods of feed evaluation, and zootechnical analysis] Metody
otsenki kormov i zootekhnicheskii analiz. Minsk, Gos.isd-vo BSSR,
Red. sel'khoz.lit-ry, 1958. 194 p. (MIRA 12:4)
(Feeding and feeding stuffs--Analysis) (Veterinary physiology)
(Physiological chemistry--Laboratory manuals)

POLYANSKIY, G.I., inzhener; ROMANOV, I.I., inzhener; FEDURKIN, N.N., instruktor
stakhanovskikh metodov truda.

Installation of pliable roofing material Sbor.mat. o nov.tekh. v stroi.
15 no.7:21-23 J1 '53. (MLRA 6:7)
(Roofing)

FEDURKIN, N.N.,instruktor peredocykh metodov truda.

Mechanized preparing of asphalt concrete mixtures. Nov.tekh. 1
pered. op. v stroi. 18 no.12:24 D '56. (MLRA 10:1)
(Mixing machinery) (Asphalt concrete)

/5

FEDURKIN, W., stareyshiy instruktorпередовых методов труда по кровельным работам.

Rolled roofing equipment. Stroitel' no.8:10-11 Ag '57. (MLRA 10:9)

1. Institut Orgstroy b. Ministerstva stroitel'stva SSSR.
(Roofing--Equipment and supplies)

FEDURKIN, N., instruktor peredovyykh metodov truda.

Using asphalt concrete in building. Stroitel' no.5:9-10 My '58.

(MIRA 11:6)

(Floors, Concrete)

FEDURKIN, V. V.

"The Use of Electrolytic Polishing of Dental Drills," Med. Prom., No.2, 1948

All-Union Sci.Res.Inst. Med. Instruments & Equipment
Kazan Factory for Dentists' Instruments

FEDURKIN, V. V.

"Investigation of the Electrolytic Polishing of Carbon Steel in Electrolytes on the Basis of Phosphoric and Chromic Acids." Thesis for degree of Cand. Technical Sci. Sub 22 Apr 49, Moscow Order of Lenin Chemicotechnological Inst. imeni D. I. Mendeleyev.

Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

Fedurkin, V. V.
USSR/Chemical Technology - Chemical Products and Their H-6
Application. Electrochemical Manufacturing. Electro-
deposition. Chemical Sources of Electrical Current.
Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 1948
Author : Fedurkin V.V.
Inst :
Title : New Technical Specifications for Galvanoplasting of Medical
Articles.
Orig Pub : Materialy po obmenu opytom i nauchn. dostizh. v med. prom-
sti, 1957, No 3, (22), 23-26
Abstract : No abstract.

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SOV/137-58-9-19563

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 205 (USSR)

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TITLE: New Developments in the Electrolytic Polishing of Metals and Alloys (Novoye v elektroliticheskoy polirovke metallov i splavov)

PERIODICAL: Materialy po obmenu opytom i nauchn. dostizh. v med. prom-sti, 1957, Nr 3 (22), pp 65-67

ABSTRACT: The assumption is made that the pitting occurring during the electrolytic polishing of a number of metals is related to the uneven dissolution of the metal owing to the formation of defects in the oxide films. Oxide films form on the metal during electrolytic polishing. However, if the sense of the current is periodically changed, this leads to the periodic removal of the oxide film and fully eliminates the pitting of the polished surface. For a large number of metals and alloys it is easy to select the period of reversing with which the electrolytic polishing proceeds without pitting. The periodic removal of the oxide film by means of the reversal of the current simplifies the process of electrolytic polishing considerably, because then

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